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3. On some new Gobiidae from Ceram and Waigen.

By Dr. L. F. de Beaufort, Eerbeek, Holland.

eingeg. 6. Dezember 1911.

The fishes described in this paper belong to a large collection, made by myself during a visit to the eastern part of the Indo-Australian Archipelago in 1909—1910. Though I intend later on to give a full account of the collection as well as figures of the new species, I thought it not without interest to publish the preliminary diagnoses of some new Gobiidae, which I caught in mountain-streams in West Ceram. I have added the description of two new species from the reef of the small isle of Saonek, situated near the southern coast of the isle of Waigen.

Gobius (Cryptocentrus) stigmatophorus n. sp.

D. VI. 12(13). A. 13(14). P. 16. l.l. $\pm$ 80, l.tr. $\pm$ 20.

Body elongate, laterally compressed. Its height is contained 6 times in the total length, 5 times in the length without caudal. The length of the head is contained 4 times in the total length, more than 3 times in the length without C. The height of the head is a little more than the half of its length. The eyes are very close together, situated in the first half of the head and their diameter is contained $3\frac{2}{3}$ times in the length of the latter. The obtuse snout is shorter than the eye. The rictus is oblique. The maxilla reaches not quite as far back as a vertical from the centre of eye. There are 8 canini on each side in the upper jaw and 5 or 6 on each side of the under jaw. The outer ones of those in

the mandibel are stronger than the others and curved backwards. The scales are ctenoid, especially strongly so on the sides of the body and on the tail, where they are larger than on the fore part of the body. The head is naked, the scales beginning just in front of the dorsal fin. The 3rd ray of the 1st dorsal is the longest and $\pm \frac{4}{5}$ of the height of the body. The second dorsal is close to the first one. Its length is not quite twice that of the first dorsal and a little more than that of the anal. Its height is less than that of the first dorsal. The pectorals are rather pointed, their length is equal to the distance from the posterior margin of the operculum to the middle of the eye; none of the rays free. The ventrals are slightly shorter than the pectorals and do not reach the vent. The caudal is obtusely pointed and $\frac{1}{5}$ of the total length. Colour in spirits greyish brown, with ± 14 vertical narrow light bands on the body. Cheeks and operculum spotted with light blue ocelli, surrounded by deeper blue. Most of the scales of the body have a blue vertical stripe. Besides these light spots and stripes there are black spots on the sides of the head and on the sides of the body. Some larger spots behind the eye and above the hinder margin of the operculum, where they are confluent and form a conspicuous dark patch. A black band crosses the basal portion of the first dorsal, 3 rows of black spots on the second dorsal. Anal with a submarginal dusky band and a dark spot at the base between each ray. Caudal crossed by ± 5 dark bands, formed by spots between the rays. Pectoral dusky at base, ventrals pigmented with dusky.

One specimen, 31 mm long, from the reef of Saonek, December 1909.

This species is closely allied to *Gobius arabicus* L., which has a similar pattern of coloration. When we compare the measurements given by Steindachner (Denkschr. Akad. Wien, LXXI, p. 147) for a juvenile *G. arabicus* with those of *G. stigmatophorus*, we find that in the latter the head is longer and the eye larger. In its mode of coloration this species has some resemblance with *Cryptocentrus octofasciatus* Tate Regan.

Gobius (Rhinogobius) scapulopunctatus n. sp.

D. VI. 8(9). A. 8. l.l. ± 27 . l.tr. 8.

Body compressed, with the head slightly depressed, the height of the head being slightly less than its breadth. The height of the body is $\frac{1}{5}$ of the total length ($\frac{1}{4}$ of the length without caudal). The length of the head is $\frac{1}{4}$ of the total length ($\frac{3}{10}$ of the length without caudal). The dorsal profile is gently sloping from the first dorsal to the eye, from here it bends rather abruptly down to the snout. The eyes are very

close together, prominent above the dorsal profile and situated in the first half of the head. Their diameter is $2\frac{1}{2}$ —3 times the length of the head. The snout is rather obtuse and shorter than the eye. Anterior nostrils tubular. Sides of head and opercles naked. Crown of head and neck covered by rather large scales, partly imbedded in the skin and not easily visible. A pore between the eyes and behind each eye as well as on the hinder margin of the praeoperculum. Rictus somewhat oblique. Jaws almost equal. Maxilla reaching under the front border of the eye. Lips thick. Tongue truncated with rounded edges and the frontmargin slightly curved inwards. Outer row of teeth in both jaws enlarged, lancet-like. Scales ctenoid, those on the fore part of the body slightly smaller than the rest. First dorsal lower than the body in the female, in the male the middle rays are prolonged and exceed the height of the body. Second dorsal beginning above the vent, lower than the body. Anal beginning behind the second dorsal, lower than the body and with the hindermost rays the longest. Pectorals as long as the head, none of the rays free and silk like. Ventrals short, not reaching the vent, the rays prolonged beyond the membrane, giving the border of the fin a festooned appearance. Caudal rounded, $\frac{1}{5}$ of the total length.

Colour in spirits whitish, with 5 saddle like brown bands on the back. The first on the neck, the second under the first dorsal, the third and fourth under the second dorsal and the fifth on the tail. Ventrally they reach to the middle of the sides of the body, where they are partly confluent with a longitudinal row of somewhat darker brown blotches. A dark brown elongate patch under the eye and an indistinct stripe running forward from the eye to the mouth. Brown patches on the sides and on the under surface of the head. Three or four small black spots above the origin of the pectoral. A black spot on the dorsal side and in the middle of tail at base of caudal. In the male there are some scattered black spots along the sides of the body and along the back similar to those above the pectoral. Two indistinct black bands on first dorsal. Rays of second dorsal and anal with black spots, forming dark bands on the fins. Pectorals, ventrals and anal dusky, darker in the male.

3 spec. (2 ♀ ♀, one ♂) 20—24 mm, from the reef at Saonek. December 1909.

This species is allied to *Ctenogobius hadropterus* Jord. & Snyder from Japan, from which it differs by having a shorter snout, a larger eye (age differences?) and by having the second dorsal placed more in advance, besides other small differences. It may easily be distinguished by the three or four black spots above the pectoral.

Schismatogobius n. g.

Body elongate, naked. Teeth fixed, long, needle like, curved backwards at the end, widely set in several rows in both jaws. Maxilla produced far behind the eye. Vertical fins well developed, first dorsal with six spines. Ventrals united, forming a well developed disk.

Gobiosoma longipinne Steind. from the Gulf of California may possibly find a place in this genus, besides the type *Sch. bruynisi*, described below. Jordan & Evermann (Fishes of N. America) placed Steindachner's species in the genus *Evermannia* making (p. 2256) however the remark, that it may be the type of a distinct genus. It agrees with *Sch. bruynisi*, in the fact of having a naked body combined with a produced maxilla, these features being the chief characteristics of the new genus. It differs however in having a much longer second dorsal and anal, with 16—17 rays, while my species has only 9 rays in those fins. The teeth of *G. longipinne* are described by Steindachner as follows: »die beiden Kiefer . . . tragen seitlich zwei, vorn 3 Reihen kleiner spitzer Zähne«. According to this description the teeth seem to be much smaller than in *Sch. bruynisi* and probably they are not curved backwards, as Steindachner does not mention anything of that kind.

Schismatogobius bruynisi n. sp.

D. VI. 9. A. 9.

Body naked, elongated, compressed, head depressed, the neck and the crown of the head flattened, giving to the latter a snake like appearance. The height of the body is contained more than 7 times in the total length, 6 times in the length without caudal. Profile sloping gradually from the first dorsal to the point of the snout. The latter is pointed, slightly shorter than the eye. Eyes situated much nearer to the end of the snout than to the hinder margin of the operculum, close together. Their longest diameter is contained 4 times in the length of the head. The latter is contained a little more than 4 times in the total length, $3\frac{1}{2}$ times in the length without caudal. Rictus oblique. Praemaxilla protractile. Maxilla very long, extended backwards far behind the eye, longer than the postorbital part of the head. Lips moderately thick. Teeth fixed, long, needle like, curved backwards at tip, widely set, in the upper jaw in three rows in front. In the lower jaw the teeth in the back row are strongly inclined backwards. The tooth row in the upperjaw much longer than that of the lower jaw, the latter row extending half way the length of the rictus. Isthmus very broad. The first dorsal is lower than the body. The distance between the fifth and sixth ray is much more than that between the other ones. The second dorsal

is in front as high as the body, and diminishes in height backwards. The anal begins scarcely behind the second dorsal and is less high than the body. The pectorals are pointed, as long as the head without snout. The ventrals are united and are shorter than the pectorals. Their length is slightly more than that of the postorbital part of the head. Caudal rather pointed, equalling the ventrals in length.

Colour yellow, reticulated all over with brown. Under the first and the second dorsal these reticulations are broader, deep black and partly confluent, giving appearance to two transversal irregular dark bands on the body. Distal end of tail black, as well as the caudal fin, which has three yellow spots, one terminal and the two others dorsally and ventrally. The black of the tail is united by a fine longitudinal black band with the black under the second dorsal. The two dorsal fins are deep black, the first one crossed by two, the second by three longitudinal yellow bands. Anal yellow, blackish along its base. Pectoral with an irregular black band. Ventrals with a subterminal black bar.

One specimen, 39 mm, from the river Eme, Honitetu, West Ceram (fresh water), February 24th 1910.

Named in honour of Lt. J. Bruynis, commanding officer of the military post at Honitetu, who helped us in every possible way.

Sicyopterus longifilis n. sp.

D. VI. 11. A. 11. P. 19. l.l. ± 66 , l.tr. 17.

The height of the body is contained 6 times in the total length, 5 times in the length without caudal. The length of the head is contained $4\frac{3}{5}$ —5 times in the total length, $3\frac{3}{4}$ —4 times in the length without caudal. The eye is nearly situated in the middle of the length of the head. Its diameter is $\frac{1}{5}$ — $\frac{1}{6}$ of the length of the head. The eyes are 2 times their diameter apart. The rounded snout is 2 times as long as the eye. The maxilla reaches under the front border of the eye. Upperlip without median cleft. Teeth in the upper jaw tricuspid. There are 8 strong teeth on each side in the lower jaw, besides two canines in front. The head is naked, except the occiput. Scales of occiput, neck and belly cycloid, the rest ctenoid. There are ± 25 scales in front of the first dorsal. These scales and those along the shoulder and on the belly are smaller than those on the sides of the body and on the tail. The two dorsals are very close together. The second till the fifth ray of the first dorsal are filamentous, and excessively long, being rather more than half the length of the body without caudal. The second dorsal is higher than the body and pointed behind. The anal is like the dorsal, but much lower, its height being less than that of the body.

Caudal rounded, longer than head. Pectoral pointed, as long as the head. The diameter of the ventral disk is the half of the length of the pectoral.

Colour in spirits brownish, whitish on the belly and at the under-side of the head, the chin however being blackish. 7 or 8 indistinct dark transverse bands on the back. A black stripe running from the eye to the corner of the mouth. First dorsal whitish, with an indistinct dusky spot between the third and fifth ray. The hinderpart of the first dorsal and the whole of the second dorsal variegated with dusky dots. Caudal blackish, its upper and under margin broadly edged with white. Pectoral blackish, with a broad clear white margin, narrowing towards the tip. Ventrals white.

3 spec. 49—97 mm, upper course of river Tubah, W. Ceram, February 27th 1910.

This species differs from all other Indo-australian *Sicyopterus* by the enormous development of its dorsal fins. It seems to be closely allied to *S. pugnans* O. Grant from Savaii, from which it differs in being less elongate, in having tricuspid instead of bicuspid teeth in the upper jaw and in having a greater number of scales in the linea lateralis and transversalis. According to the figure there is also a difference in the place of the eye, which is represented as being nearer to the tip of the snout than to the hind margin of the operculum.

Sicyopterus brevis n. sp.

D. VI. 11—12. A. 12. l.l. ± 62 , l.tr. ± 16 .

The height of the body is contained $5\frac{1}{2}$ times in the total length, $4\frac{3}{5}$ times in the length without caudal. The length of the head is contained $4\frac{1}{2}$ times in the total length, $3\frac{3}{4}$ in the length without caudal. The eye is situated in the middle of the length of the head. The diameter of the eye is $\frac{1}{4}$ of the length of the head. The eyes are $1\frac{1}{2}$ times their diameter apart. Upperlip without median cleft. No papillae on the gum beneath the upper lip. Teeth in the upper jaw tricuspid. The first and the two last mandibular teeth caninoid, the middle ones minute. The maxilla does not reach quite as far as a vertical from the middle of the eye. Head naked, except the occiput. The cycloid scales on the occiput and neck and on the belly are smaller than the ctenoid ones along the sides of the body and on the tail. The length of the third and longest ray of the first dorsal is equal to the height of the body. Second dorsal and anal much shorter than the height of the body. The pectoral is shorter than the head. The longitudinal diameter of the ventral disk is more than the half of the length of the head. Colour in spirits yellowish. A dark longitudinal band along the sides of the

body, and another interrupted zic-zac shaped one, which is less distinct, at each side along the back. An indistinct dusky spot between the third and fourth ray of the first dorsal. Second dorsal obliquely striped with blackish, anal white with a dark subterminal band. Caudal with an indistinct median stripe, a continuation of the band along the sides of the body and with traces of a horse-shoe shaped submarginal band. A dark stripe runs from the eye to the corner of the mouth.

Two spec. 44 and 45 mm, uppercourse of river Tubah, W. Ceram, February 27th 1911.

This species is distinguished by its short body. It seems to be allied to *S. taeniurus* Gthr., but differs in having smaller scales, in having a shorter pectoral etc.

Sicyopus multisquamatus n. sp.

D. VI. 11. A. 10. l.l. ± 55 , l.tr. ± 14 .

Body elongate, rather more depressed than compressed. The height of the body is contained a little more than 8 times in the total length, almost 7 times in the length without caudal. Head flattened above, the upper profile horizontal from the first dorsal till the eye, then sloping to the point of the snout. The length of the head is contained $4\frac{1}{2}$ times in the total length, almost $3\frac{3}{4}$ times in the length without caudal. The diameter of the eye is equal to the length of the snout and $\frac{1}{4}$ of the length of the head. The interorbital space is rather more than $1\frac{1}{2}$ times the diameter of the eye. The cleft of the mouth is low and horizontal, as in *Sicyopterus*. The entire upper lip and the sides of the lower lip are thick and swollen. The maxilla reaches a vertical from the middle of the eye. A single row of about 20 strong yellow-tipped teeth in the upper jaw. These teeth stand wide apart; they are pointed and strongly curved inwards. A similar row of teeth in the mandible, but here the teeth are much smaller and not curved. Isthmus broad. The first dorsal is short and much lower than the second, one from which it is widely separated. The first rays of the second dorsal are as high as the body in front, but the last rays are much shorter.

The anal is not so high as the second dorsal, the first rays are the longest. The caudal is truncated, its length is a little more than $\frac{1}{6}$ of the total length. The rounded pectoral is shorter than the head. The ventrals are shaped as in *Sicyopterus*, but only the centre of the disk is adnated to the belly. Its length is almost equal to half the length of the head. Scales on neck and belly cycloid and small, on the hinder-part of the sides and on the tail large and strongly ctenoid. Head naked; the scales reach to the sides of the occiput, but they are here almost hidden in the skin and scarcely perceptible. Colour in spirits

yellowish. A triangular blackish spot on the operculum. A dark band along the sides. Rays of the dorsal fins dark. Anal colourless.

One spec. 58 mm, from a brook in the mountains near Honitetu, W. Ceram. February 19th 1910.

This species is easily distinguished from the other species of the genus by the great number of scales in the l.l. and l.tr.

II. Mitteilungen aus Museen, Instituten usw.

1. Deutsche Zoologische Gesellschaft.

Am 1. Januar d. J. erfolgte in Basel die Feststellung des Ergebnisses der

Neuwahl des Vorstandes

durch den 1. Vorsitzenden, Herrn Prof. Dr. Zschokke, mit Unterstützung der Herren Dr. K. R. Hoffmann und Dr. P. Steinmann.

Von den bis zum 31. Dezember 1911 eingegangenen 158 Stimzetteln waren 154 gültig, 4 ungültig.

Von den 154 gültigen fielen

für das Amt des ersten Vorsitzenden

auf Herrn Prof. Korschelt in Marburg . . . 151

- - - Boveri in Würzburg . . . 3

für das Amt der stellvertretenden Vorsitzenden

auf Herrn Prof. Zschokke in Basel . . . 152

- - - Boveri in Würzburg . . . 148

- - - Heider in Innsbruck . . . 146

ferner auf Herrn Prof. Korschelt in Marburg 3, auf die Herren Prof. Spengel in Gießen und Prof. Ziegler in Stuttgart je 2, auf die Herren Prof. Braun in Königsberg, Döderlein in Straßburg, Doflein in München, Escherich in Tharandt, Grobben in Wien, Hatschek in Wien, Heymons in Berlin, Ludwig in Bonn und Spemann in Rostock je 1.

für das Amt des Schriftführers

auf Herrn Prof. Brauer in Berlin . . . 153

- - - Haecker in Halle . . . 1.

Es sind demnach gewählt:

- 1) Herr Prof. Korschelt zum Vorsitzenden
- 2) - - Zschokke - 1. stellvertr. Vorsitzenden
- 3) - - Boveri - 2. - -
- 4) - - Heider - 3. - -
- 5) - - Brauer - Schriftführer.

Die Gewählten haben dem bisherigen Herrn Vorsitzenden sich zur Annahme der Wahl bereit erklärt.

A. Brauer, Schriftführer,
Berlin N 4. Zoolog. Mus. Invalidenstr. 43.